

DEPARTMENT OF THE AIR FORCE  
Headquarters US Air Force  
Washington, DC 20330-1480

CFETP 1C5X1  
Parts I and II  
JUNE 2002

## **AFSC 1C5X1**

# **AEROSPACE CONTROL AND WARNING SYSTEMS SPECIALTY**



## **CAREER FIELD EDUCATION AND TRAINING PLAN**

# CAREER FIELD EDUCATION AND TRAINING PLAN AEROSPACE CONTROL AND WARNING SYSTEMS SPECIALTY AFSC 1C5X1

## TABLE OF CONTENTS

<b>PART I</b>	<b>1</b>
Preface	
Abbreviations and Terms Explained	
<b>Section A – General Information</b>	<b>5</b>
Purpose of CFETP	
Use of CFETP	
Coordination and Approval of the CFETP	
<b>Section B – Career Field Progression and Information</b>	<b>6</b>
Specialty Descriptions	
Skill/Career Progression	
Apprentice Level (3)	
Journeyman Level (5)	
Craftsman Level (7)	
Superintendent Level (9)	
Chief Enlisted Manager (CEM) Level (00)	
Training Decisions	
Community College of the Air Force	
<b>Section C – Skill Level Training Requirements</b>	<b>12</b>
Purpose	
Training Requirements	
Apprentice Level (3)	
Journeyman Level (5)	
Craftsman Level (7)	
Superintendent Level (9)	
<b>Section D – Resource Constraints</b>	<b>15</b>
<b>PART II</b>	
<b>Section A – Specialty Training Standard</b>	<b>16</b>
<b>Section B – Course Objective List</b>	<b>31</b>
<b>Section C – Support Materials</b>	<b>35</b>
<b>Section D – Training Course Index</b>	<b>35</b>
<b>Section E – MAJCOM Unique Requirements</b>	<b>36</b>

---

OPR: HQ USAF/XOOY (CMSgt Reta E. Muasau)  
 Approved by: Colonel Charles W. Eyler  
 Prepared by: 334 TRS/TRR  
 Supersedes: CFETP 1C5X1, Dated June 1999  
 Number of Pages: 37

# **AEROSPACE CONTROL AND WARNING SYSTEMS SPECIALTY**

## **AFSC 1C5X1**

### **CAREER FIELD EDUCATION AND TRAINING PLAN**

#### **Part 1**

#### ***PREFACE***

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education and training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel with a clear career path to success in all aspects of career field training.

2. The CFETP consists of two parts used by supervisors to plan, manage, and control training within the career field.

2.1. Part 1 provides information necessary for overall management of the specialty. It contains administrative details and a specialty description, explains the purpose and use of the CFETP, identifies career field requirements and progression, provides career field information, and documents training decisions. Each skill level is also defined, known resource constraints are identified, and a list of continuation training for the specialty is provided. Note: AFMAN 36-2108, *Airman Classification*, contains the specialty description.

2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training, Air Education and Training Command (AETC) conducted training, wartime course, core tasks, and correspondence course requirements; Section B contains the course objective list and training standards supervisors will use to determine if airmen satisfied training requirements; Section C identifies available support materials. An example is a qualification training package (QTP) which may be developed to support proficiency training. Section D identifies a training course index, which is used to determine resources available to support training. Included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements.

3. This CFETP is designed to ensure individuals in AFSC 1C5X1 receive comprehensive and effective training at the appropriate phases of their career. At unit level, supervisors and trainers use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

#### ***ABBREVIATIONS/TERMS EXPLAINED***

**Advanced Distributed Learning (ADL).** Training delivered to students at their base of assignment without an Air Education and Training Command (AETC) instructor physically present. The training media may take the form of interactive courseware (ICW), video-teletraining (VTT), videotape, paper, or some combination of these.

**Advanced Training.** Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

**Air Force Career Field Manager (AFCFM).** An individual charged with the responsibility for overseeing all training and career field management aspects of an Air Force specialty or group of specialties.

**Air Force Job Qualification Standard (AFJQS)/Command Job Qualification Standard (CJQS).** A comprehensive task list which describes a particular job type or duty position. Supervisors may use these

to document task qualifications. The tasks on AFJQS/CJQS are common to all persons serving in the described duty position.

**Allocation Curves.** The relation of hours of training in different training settings to the degree of proficiency that can be achieved on specified performance requirements.

**Career Field Education and Training Plan (CFETP).** A comprehensive, multipurpose document that encapsulates the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, eliminate duplication, and ensure the training budget is defensible.

**Career Training Guide (CTG).** A document that uses Task Modules (TMs) in lieu of tasks to define performance and training requirements for a career field.

**Combat Mission Ready (CMR).** An Aerospace Control and Warning System member who has satisfactorily completed initial qualification training and mission qualification training and maintains qualification and proficiency in the command or unit operational mission.

**Continuation Training (CT).** Additional training exceeding requirements with emphasis on present or future duty assignments.

**Core Task.** Tasks the AFCFM identifies as minimum qualification requirements within an AFSC, regardless of duty position. Core tasks may be specified for a particular skill level or in general across the AFSC. Guidance for using core tasks can be found in the applicable CFETP narrative.

**Course Objective List (COL).** A comprehensive list, derived from initial/advanced skills course training standards, identifying the tasks and knowledge requirements, and respective standards, to achieve a 3- or 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Developing, Managing, and Conducting Military Training Programs*.

**Enlisted Specialty Training.** A mix of formal training (technical school) and informal training (OJT) to qualify and upgrade airmen in each skill level of a specialty.

**Exportable Training.** Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

**Field Technical Training.** Special or regular on-site training conducted by a field training detachment (FTD) or by a mobile training team (MTT).

**Initial Skills Training.** A formal resident course that results in award of the 3-skill level AFSC.

**Instructional Systems Development (ISD).** A deliberate and orderly, but flexible process for planning, developing, validating, implementing, and reviewing instructional programs. It ensures personnel are taught in a cost efficient way the knowledge, skills, and attitudes essential for successful job performance.

**Occupational Survey Report (OSR).** A detailed report that shows the results of an occupational survey of tasks performed within a particular AFS.

**On-the-Job Training (OJT).** Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

**Optimal Training.** The ideal combination of training settings that results in the highest levels of proficiency on specified performance requirements within the minimum time possible.

**Qualification Training (QT).** Actual hands-on task performance training designed to qualify an individual in a specific duty position. This portion of the dual channel OJT program occurs both during and after the upgrade training process. It is designed to provide the performance skills required to do the job.

**Qualification Training Package (QTP).** An instructional course designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer based, or in other audio-visual media.

**Representative Sites.** Typical organizational units having similar missions, weapons systems, equipment, or set of jobs used as a basis to estimate average training capacities and costs within the Training Impact Decision System (TIDES).

**Resource Constraints.** Resource deficiencies, such as funds, facilities, time, manpower, and equipment that preclude desired training from being delivered.

**Skills Training.** A formal course that results in the award of a skill level.

**Specialty Training.** A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in the award of a skill level.

**Specialty Training Package and Communications Security (COMSEC) Qualification Training Package.** A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by the National Security Agency (NSA), and are administered by qualified COMSEC personnel.

**Specialty Training Standard (STS).** An Air Force publication that describes skills, tasks, and knowledge which an airman in a particular specialty may be expected to perform or to know on the job. It further serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools and correspondence courses.

**Standard.** An exact value, a physical entity, or abstract concept, established and defined by authority, custom, or common consent, to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

**Task Module (TM).** A group of tasks performed within an AFS that are performed together and that require common knowledge, skills, and abilities. TMs are identified by an identification code and a statement.

**Total Force.** The collective components (active, reserve, guard, and civilian elements) of the United States Air Force.

**Training Capability.** The capability to provide training on specified requirements, based on the availability of resources.

**Training Impact Decision System (TIDES).** A computer-based decision support technology designed to assist AFCFMs in making critical judgments relevant to what training should be provided to personnel within career fields, when training should be provided (at what career points), and where training should be conducted (training setting).

**Training Planning Team (TPT).** Comprised of the same personnel as the Utilization and Training Workshop (U&TW); however, TPTs address a wider range of issues than those normally addressed in the U&TW forum.

**Training Requirements Analysis.** A detailed analysis of tasks for a particular AFS to be included in the training decision process.

**Training Setting.** The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study, advanced distributed learning, etc).

**Upgrade Training (UGT).** Mandatory training that leads to award of a higher skill level in an AFS.

**Utilization and Training Pattern.** A depiction of the training provided to, and the jobs performed by, personnel throughout their tenure within a career field or AFS. There are two types of patterns: 1) Current pattern, which is based on the training provided to incumbents and the jobs to which they have been and are assigned; and 2) Alternate pattern, which considers proposed changes in manpower, personnel, and training policies.

**Utilization and Training Workshop (U&TW).** A forum consisting of the AFCFM, MAJCOM AFSC functional managers (FMs), subject matter experts, and AETC training personnel that determines career ladder training requirements.

**Wartime Task.** Tasks the AFCFM identifies as minimum qualification requirements trained in the resident wartime course(s).

## **SECTION A - GENERAL INFORMATION**

**1. Purpose.** This CFETP provides information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective and efficient 1C5X1 career field training program. The plan outlines the training that individuals must receive in order to develop and progress throughout their career. For the purpose of this plan, training is divided into four areas: initial skills, upgrade training (UGT), qualification training (QT), and continuation training (CT). Initial skills training is the Air Force Specialty (AFS)-specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion required for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge training required for the job. Continuation training is additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required. The CFETP also serves other purposes, to include the following:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. It is also used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in this specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training medium.

1.4. Identifies major resource constraints that impact full implementation of the desired career field training program.

**2. Uses.** The AFCFM will maintain this CFETP in accordance with AFMAN 36-2245. MFMs will review the CFETP at least annually to ensure currency and accuracy and forward recommended changes to the AFCFM. Training managers at all levels will use this plan to ensure a comprehensive and cohesive training program is available and instituted for each individual in the 1C5X1 career ladder.

2.1. AETC training personnel will develop/revise formal resident, non-resident, field, and exportable training based on requirements established by the user and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies to obtain resources needed to meet training requirements.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial and upgrade skills requirements. Identified requirements can be established by OJT, resident training, contract training, or exportable courses. MAJCOM-developed training to support this AFSC must be identified for inclusion in this plan and must not duplicate available training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

**3. Coordination and Approval.** The AFCFM is approval authority. MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for this specialty will initiate an annual review of this document by AETC and MFMs to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training. Applicable inputs/changes to this CFETP will be routed to 334 TRS/TRR, 700 Hangar Road, Suite 123, Keesler AFB MS 39534-2235.

## **SECTION B - CAREER PROGRESSION AND INFORMATION**

### **4. Specialty Description.**

**4.1. Specialty Summary.** (Note: Refer to AFMAN 36-2108.) Manages and operates aerospace control and warning systems, including functions involving surveillance, identification, weapons control, data link management, communications/computer system management, electronic attack (EA), and electronic protection (EP). Provides RADAR control and monitoring of air weapons during offensive and defensive air operations. Makes decisions in the conduct of air operations and in system equipment management. Related DoD Occupational Subgroup: 221.

### **4.2. Duties and Responsibilities.**

**4.2.1.** Operates aerospace control and warning systems equipment. Interprets and reacts to RADAR scope presentations and to generated console displays. Compares and reports track positions based on flight data or data base files. Performs surveillance, identification, weapons control, data link, and data management functions. Conducts mission planning. Prepares and executes air tasking orders and airspace control orders. Participates as a crewmember of an operational unit. Responsible for safety of flight for air operations being controlled. Tears down, loads, unloads, and erects equipment and components.

**4.2.2.** Gathers, displays, records, and distributes operational information. Coordinates with and exchanges air movement and identification information among air defense, air control, range control, and air traffic control agencies on matters pertaining to aircraft operations. Operates data link equipment and other automated data exchange devices to gather and relay operational information. Reports emergency signals and EA observations. Maintains logs, forms, and database files. Evaluates RADAR detection and performance. Maintains liaison with air defense artillery and surface and naval fire units to ensure safe passage of friendly air traffic.

**4.2.3.** Performs EP functions. Maintains maximum RADAR sensitivity using EP techniques to eliminate degradation caused by electronic warfare activities or other influences. Monitors operation of RADAR inputs and countermeasures consoles, anti-jamming displays, and RADAR sensors to enhance RADAR presentations.

**4.2.4.** Performs training, planning, standardization, evaluation, and other staff duty functions. Performs staff assistance visits to subordinate units. Tests and evaluates capabilities of new equipment and propriety of new procedures.

**5. Skill/Career Progression.** Adequate training and timely progression from the apprentice to the superintendent skill level plays an extremely important role in the Air Force's ability to accomplish its mission. Therefore, it is essential that everyone involved in training do his or her part to plan, develop, manage, conduct, and evaluate an effective and efficient training program. The guidance provided in this part of the CFETP will ensure individuals receive viable training at the appropriate points in their career. The following narratives, and the AFSC 1C5X1 career field charts, identify the training career path. They define the training required in an individual's career.

**5.1. Apprentice (3) Level.** Initial skills training in this specialty consists of the tasks and knowledge training provided in the 3-skill level resident courses (E3ABR1C531 006) located at Keesler AFB, MS, and (Q-JSS-1C531) at Tyndall AFB, FL. The decision to train specific task and knowledge items in the initial skills courses is based on a review of the occupational survey report (OSR) data, training requirements analysis data, and 1C531 subject matter expert (SME) input. Task and knowledge requirements are identified in the specialty training standard in Part II of this CFETP, Section A. Individuals will work with a trainer to enhance their knowledge and skills and prepare for duty position qualification. Individuals must complete one of the initial skills courses to be awarded AFSC 1C531. (Note: Course Q-JSS-1C531 at Tyndall AFB, FL, is scheduled to deactivate on 1 Oct 02, at which time all 1C5X1 apprentice students will attend the E3ABR1C531 006 course at Keesler AFB, MS.)



**5.2. Journeyman (5) Level.** Training for the 5-skill level consists of task and knowledge training provided through the specialty training standard (STS) and is based on an analysis of duties contained in AFMAN 36-2108. Career knowledge is provided in the 1C5X1 5-skill level career development course (CDC). Individuals are entered into 5-skill level upgrade training (UGT) upon arrival at their initial duty station. All individuals upgrading to 5-skill level in this specialty must complete the following: 1C5X1 CDCs; certification on all core tasks indicated on the STS; unit-specific duty position tasks; and 15 months in upgrade training (9 months for retrainees). Once upgraded to the 5-level, journeymen begin to broaden their experience through continuation training and should seek qualification in multiple duty positions. Five-levels may be assigned/qualified at job positions such as Weapons Director (WD), Surveillance Technician (ST), Interface Control Technician (ICT), Data Systems Technician (DST), and Electronic Protection Technician (EPT). Individuals attend the Airman Leadership School (ALS) after having 48 months in the Air Force. Appointment as unit trainers is authorized for individuals considered the "most qualified". Individuals use their CDCs to help prepare for promotion testing under the Weighted Airman Promotion System (WAPS). They should consider continuing their education towards a Community College of the Air Force (CCAF) degree in Air and Space Operations Technology.

**5.3. Craftsman (7) Level.** Training for the 7-skill level consists of task and knowledge training provided through the specialty training standard and is based on analysis of the duties contained in AFMAN 36-2108. Individuals are entered into 7-level upgrade training on the first day of the promotion cycle. All individuals upgrading to the 7-skill level in this specialty must complete the following: certification on all core tasks indicated on the STS; unit-specific duty position tasks; and 12 months in upgrade training. A craftsman can expect to fill various supervisory and management positions such as Crew Chief, Operations Coordinator (OC), Battle Staff Coordinator (BSC), Weapons Director (WD), Air Surveillance Technician (AST), and as a primary task certifier. They may also be assigned to staff positions such as NCOIC of various duty sections as well as positions in standardization/evaluation and training offices. They may also be assigned to Group and MAJCOM positions as well as Air National Guard advisor positions. 1C571s should take courses and otherwise increase their knowledge in management of resources and personnel. Continued academic education through CCAF and higher degree programs is strongly encouraged. When promoted to Technical Sergeant, individuals will attend the Noncommissioned Officer Academy (NCOA). Note: The 1C5X1 7-skill level Distance Learning course was suspended and it will be replaced by 7-level CDCs (currently in development) at a later date. Meanwhile there are no 7-level course or CDC prerequisites for award of the 1C5X1 7-skill level.

**5.4. Superintendent (9) Level.** To be awarded AFSC 1C591 an individual must be a SMSgt and complete any other requirements specified in AFMAN 36-2108. A Superintendent can expect to fill positions such as Operations Superintendent as well as staff positions at Numbered Air Forces and MAJCOMs. Additional training in the areas of training development, budget, manpower, resources, and personnel management should be pursued through continuing education. Higher education and completion of courses outside the career AFSC core competencies are also recommended.

**5.5. Chief Enlisted Manager (CEM) (00) Level.** To be awarded AFSC 1C500 an individual must be a CMSgt and complete any requirements specified in AFMAN 36-2108. A CEM is expected to fill positions such as Operations Superintendent, staff positions as Numbered Air Forces, MAJCOMs, AFPC, and HQ USAF. Additional training in the areas of training development, budget, manpower, resources, and personnel management must be pursued through continuing education. Higher education and completion of courses outside the career AFSC core competencies are also recommended.

**6. Training Decisions.** This CFETP uses a building block approach to encompass the entire spectrum of training requirements for the Aerospace Control and Warning Systems career field. It was developed to include life-cycle training requirements for this specialty. The spectrum includes a strategy for when, where, and how to meet the training requirements. The strategy must be apparent and affordable to reduce duplication of training and eliminate a disjointed approach to training.

**6.1. Initial Skills Training.** At the May 2001 Utilization and Training Workshop (U&TW), the 1C5X1 STS was changed to incorporate training on the Theater Battle Management Core System (TBMCS) in the

initial skills course. Training requirements will discontinue for the Contingency Theater Automated Planning System (CTAPS) when TBMCS training becomes available. Training was also expanded in areas related to Weapons Operations Fundamentals and Mission Planning.

**6.2. Five-Level Upgrade Training.** At the May 2001 U&TW, training requirements were expanded in areas related to Weapons Operations Fundamentals and Mission Planning. The requirement was deleted for certain aspects of security training in the 5-level CDCs (human intelligence, espionage, subversion, sabotage, terrorism). This material is already covered in the Promotion Fitness Examination Study Guide, AFPAM 36-2241, Volume 1 and was found to be redundant. CDCs are now being revised and will incorporate these changes.

**6.3. Seven-Level Upgrade Training.** At the May 2001 U&TW, expanded training requirements were documented in the area of Crew Resource Management. Members of the U&TW also voted to convert the previous 7-level distance learning course (suspended Oct 2000) to CDCs with the potential for interactive courseware supplements. CDCs are currently in development. The requirement to attend or complete a 7-level course or CDCs is waived for an undetermined period, pending CDC completion.

**6.4. Continuation Training.** The purpose of continuation training is to provide additional training that exceeds the minimum upgrade training requirements and allow individuals to become proficient at their present and future duty positions. Continuation training also assists individuals in maintaining proficiency at their duty position and affords them an opportunity to reach their full potential. MAJCOM FMs must develop a continuation training program that ensures individuals in the 1C5X1 career field receive the necessary training at the appropriate point in their career.

**7. Community College of the Air Force (CCAF).** Enrollment in CCAF occurs upon completion of basic military training. Off-duty education is a personal choice but is highly encouraged. CCAF provides the opportunity to obtain an Associate in Applied Science degree in Air and Space Operations Technology. Information provided below in paragraph 7.3. is extracted from the 2202 General Catalog. Contact the local education officer for the most current course information. In addition to its associates degree program, CCAF offers the following:

**7.1. Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

**7.2. Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The College uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

**7.3. Degree Requirements.** Prior to completing the Air and Space Operations Technology degree through CCAF, the five-level must be awarded and the following requirements must be met:

Subject Area	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Technical Education; Leadership, Management, and Military Studies, or General Education	
<b>Total</b>	<b>64</b>

7.3.1. **Technical Education** (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective subjects or courses. Requests to substitute comparable courses or to exceed specified semester hour values in any subject or course must be approved in advance.

7.3.2. **Leadership, Management, and Military Studies** (6 Semester Hours): Professional military education, civilian management courses accepted in transfer and/or by testing credit.

7.3.3. **Physical Education** (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training.

7.3.4. **General Education** (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the general education requirement and agree with the definitions of applicable general education subjects/courses as provided in the CCAF General Catalog.

7.3.5. **Program Elective** (15 Semester Hours): Courses applying to technical education, leadership, management, and military studies, or general education requirements; natural science courses meeting general education requirement application criteria; foreign language credit earned at Defense Language Institute or through Defense Language Proficiency Test; maximum six semester hours of CCAF degree-applicable technical course credit otherwise not applicable to program of enrollment. See the CCAF General Catalog for details regarding the Associates of Applied Science for this specialty.

7.4. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should actively pursue an associates degree. A degreed faculty is necessary to maintain accreditation through the Southern Association of Colleges and Schools.

**8. Career Field Education and Training Flowcharts.** Charts that depict this specialty's career path are presented on the next pages. The career path outlines when training is required for each skill level and function within this specialty.

Figure 1. Enlisted Career Path

Figure 2. Career Field Pyramid

**Enlisted Career Path.**

Education and Training Requirements	GRADE REQUIREMENTS				
	Rank	Earliest Sew-on	Air Force Average Sew-on	1C5X1 Average Sew-on	High Year of Tenure (HYT)
<b>Basic Military Training School</b>	AB				
<b>Apprentice Technical School (1C531) (3-Skill Level)</b>	AB, Amn A1C	6 months 16 months			
<b>Upgrade To Journeyman (1C551, 1C551D) (5-Skill Level)</b> - Minimum 15 months on-the-job training. - Minimum 9 months on-the-job training for retrainees. - Completion of 5-level CDCs.	SrA	28 months	3 years		10 years
<b>Airman Leadership School (ALS)</b> - Must be a SrA with 48 months time in service or be a SSgt selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).					
<b>Upgrade To Craftsman (1C571, 1C571D) (7-Skill Level)</b> - Minimum rank of SSgt select - 12 months OJT - Completion of 7-level CDCs (when published)	SSgt	3 years	4.8 years	4.7 years	20 years
<b>Noncommissioned Officer Academy (NCOA)</b> - Must be a TSgt or TSgt selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt	5 years	13.5 years	15.2 years	20 years
<b>USAF Senior NCO Academy (SNCOA)</b> - Must be a CMSgt selectee, SMSgt, SMSgt selectee, or a MSgt selected to attend - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	MSgt	8 years	16.7 years	16.5 years	24 years
<b>Upgrade To Superintendent (1C591) (9-Skill Level)</b> - Minimum rank of SMSgt.	SMSgt	11 years	20.5 years	19.4 years	26 years
<b>Chief Enlisted Manager (CEM) (1C500)</b> - Minimum rank of CMSgt - Completed SNCO Academy (Active Duty Only)	CMSgt	14 years	22.8 years	22.7 years	30 years
Data current as of Feb 02					

**Figure 1.**

# Career Field Pyramid.

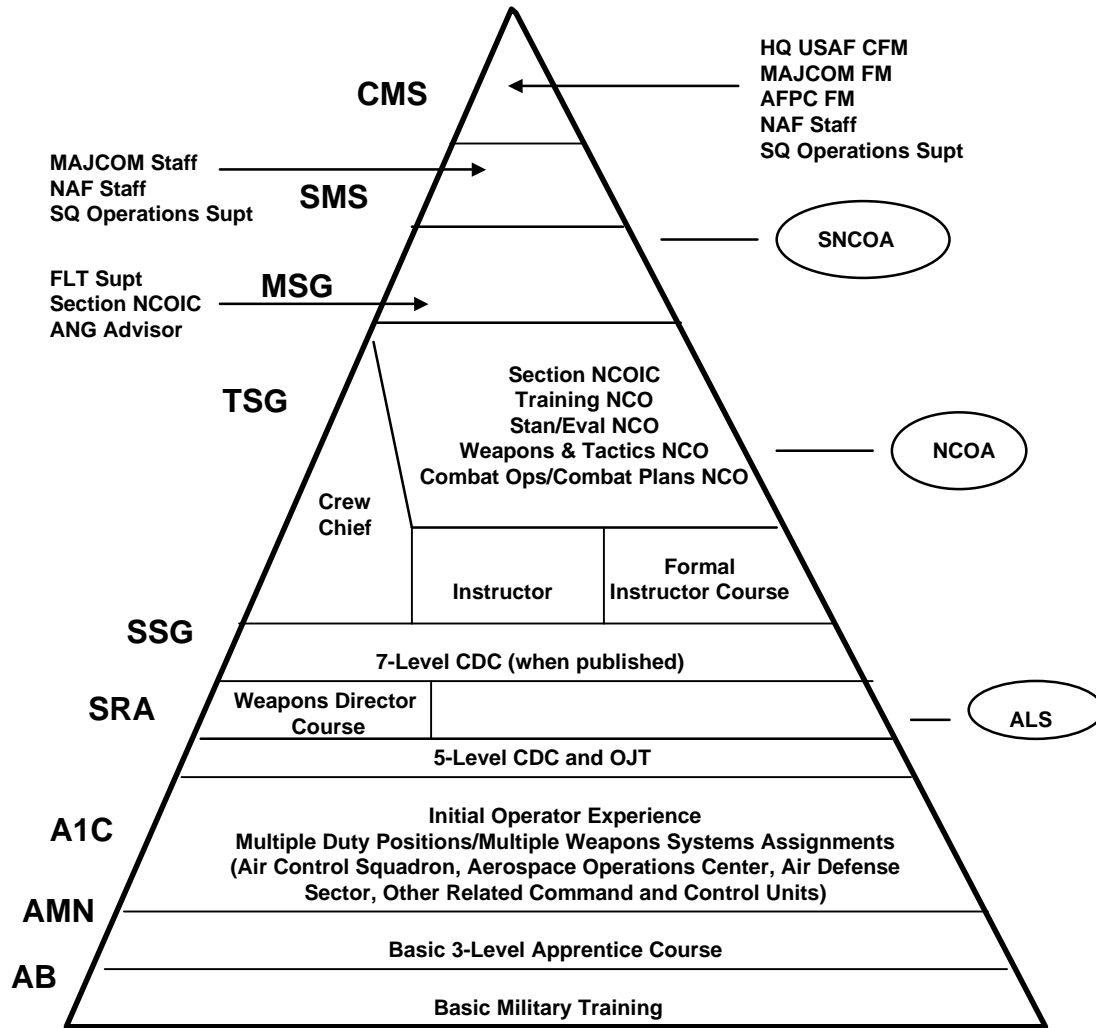


Figure 2.

## **SECTION C - SKILL LEVEL TRAINING REQUIREMENTS**

**9. Purpose.** Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS at Part II of this CFETP.

### **10. Specialty Qualifications:**

#### **10.1. Apprentice Level Training:**

##### **10.1.1. Specialty Qualification.**

**10.1.1.1. Knowledge.** Knowledge is mandatory of the characteristics and limitations of aerospace surveillance and reporting systems; aircraft detection and tracking; RADAR capabilities and limitations; communications equipment capabilities and limitations; RADAR console and data link equipment presentations; receiving, recording, and relaying system information; fixed and mobile command and control system characteristics; aircraft control procedures; techniques, aircraft performance characteristics, and armament; meteorology pertaining to air weapons control operations; printout interpretations; combat identification techniques; air traffic regulations; electronic attack (EA) equipment capabilities and limitations; EA techniques; and geographical reference systems.

**10.1.1.2. Education.** For entry into this specialty, completion of high school or general education development (GED) equivalency is mandatory.

**10.1.1.3. Training.** For award of the 1C531 AFSC, completion of a basic aerospace control and warning systems course is mandatory.

**10.1.1.4. Experience.** Experience is mandatory in performing functions such as aerospace control and warning systems activities; operation of data display and computer input equipment and RADAR indicator equipment; interpretation of computer-generated displays/printouts and RADAR console presentations; and environmental systems operational procedures and techniques.

**10.1.1.5. Other.** Eligibility for a Secret security clearance is mandatory for award and retention of this AFSC. Normal color vision is mandatory as defined in AFI 48-123 for entry into this AFSC. Qualification to operate government vehicles is according to AFI 24-301 and AFMAN 24-309 is highly desirable for entry into this AFSC.

**10.1.2. Training Sources and Resources.** Completion of the Aerospace Control and Warning Systems Apprentice Course at Keesler AFB MS satisfies the knowledge and training requirements specified in the specialty qualification section (above) for award of the 3-skill level.

**10.1.3. Implementation.** Upgrade training starts when an individual is assigned to their first duty position. Upon completion of upgrade training, qualification training is initiated anytime an individual is assigned duties they are not qualified to perform.

#### **10.2. Journeyman Level Training:**

**10.2.1. Specialty Qualification.** All qualifications for AFSC 1C531 apply to 1C551 requirements.

**10.2.1.1. Knowledge.** Mandatory knowledge includes: characteristics and limitations of aerospace surveillance and reporting systems; aircraft detection and tracking; RADAR capabilities and limitations; communications equipment capabilities and limitations; RADAR console and data link equipment presentations; receiving, recording, and relaying system information; fixed and mobile command and control systems characteristics; aircraft control procedures; techniques, aircraft performance

characteristics, and armament; meteorology pertaining to air weapons control operations; printout interpretations; combat identification techniques; air traffic regulations; EA equipment capabilities and limitations; EA techniques; geographical reference systems; and enemy order of battle.

10.2.1.2. **Education.** Completion of high school or general education development (GED) equivalency is mandatory for entry into this AFSC.

10.2.1.3. **Training.**

10.2.1.3.1. Completion of the 1C551 CDC satisfies the knowledge requirements specified in the specialty qualification section for award of the 5-skill level.

10.2.1.3.2. For award of the 1C551D AFSC, completion of the undergraduate weapons director course is mandatory.

10.2.1.4. **Experience.** Experience is mandatory in performing functions such as aerospace control and warning systems activities; operation of data display and computer input equipment and RADAR indicator equipment; interpretation of computer-generated displays/printouts and RADAR console presentations; and environmental systems operational procedures and techniques.

10.2.1.5. **Other.**

10.2.1.5.1. Eligibility for a Secret security clearance is mandatory for award and retention of this AFSC.

10.2.1.5.2. For award of AFSC 1C551D it is mandatory to hold at least a five-level in AFSC 1C5X1.

10.2.1.5.3. For entry, award, and retention of AFSC 1C551D, physical qualification is mandatory for weapons director duty according to AFI 48-123.

10.2.1.5.4. Specialty Shredout: Suffix D - Weapons Director.

10.2.2. **Training Sources and Resources.** CDC 1C551 may be ordered through the unit training manager. The STS identifies all the core tasks required for qualification in an individual's duty position.

10.2.3. **Implementation.** Entry into upgrade training begins when an individual arrives at their initial assignment.

10.3. **Craftsman Level Training:**

10.3.1. **Specialty Qualification.** All qualifications for 1C531/1C551 apply to the 1C571 requirements.

10.3.1.1. **Knowledge.**

10.3.1.1.1. For AFSC 1C571 and 1C571D, mandatory knowledge includes: functional relationship within and among aerospace control and warning systems; aerospace control and warning systems operations; EA equipment, capabilities, and limitations; ground environment systems; electronic facilities; and EA and electronic protection (EP) capabilities within each sensor.

10.3.1.1.2. For AFSC 1C571D, knowledge of aircraft control procedures and techniques is mandatory.

10.3.1.2. **Education.** Completion of high school or general education development (GED) equivalency is mandatory for entry into this AFSC.

10.3.1.3. **Training.**

10.3.1.3.1. Completion of the Aerospace Control and Warning System 7-level CDCs, when published, will be mandatory for award of the 7-skill level. Until CDCs are published, this requirement is waived.

10.3.1.3.2. For award of the 1C571D AFSC, completion of the undergraduate weapons director course is mandatory.

**10.3.1.4. Experience.**

10.3.1.4.1. For AFSC 1C571, qualification is mandatory as an Aerospace Control and Warning Systems Journeyman. Experience is also mandatory performing or supervising functions such as aerospace surveillance and control systems or EA activities.

10.3.1.4.2. For AFSC 1C571D, qualification is mandatory as an Aerospace Control and Warning Systems Journeyman, Weapons Director. Experience is also mandatory performing or evaluating RADAR control and monitoring of air weapons.

**10.3.1.5. Other.**

10.3.1.5.1. Eligibility for a Secret security clearance is mandatory for award and retention of this AFSC.

10.3.1.5.2. For AFSC 1C571D, physical qualification for Weapons Director duty according to AFI 48-123 is mandatory for award and retention of the specialty shredout.

10.3.1.5.3. Specialty Shredout: Suffix D - Weapons Director

**10.3.2. Training Sources and Resources.** Upon publication, CDC 1C571 may be ordered through the unit training manager. The STS identifies all core tasks required for qualification in an individual's duty position.

**10.3.3. Implementation.** Entry into 7-level upgrade training is initiated on the first day of the promotion cycle.

**10.4. Superintendent Level Training:**

**10.4.1. Specialty Qualifications.**

10.4.1.1. **Knowledge.** Mandatory knowledge includes: thorough understanding of aerospace control and warning systems operations, equipment, procedures, and techniques for optimization of system effectiveness. Knowledge in personnel resource management is also mandatory.

10.4.1.2. **Education.** Completion of high school or general education development (GED) equivalency is mandatory for entry into this AFSC.

10.4.1.3. **Training.** Completion of initial skills course, five-level CDC, 7-level CDC (when published), and prerequisite professional military education.

10.4.1.4. **Experience.** For AFSC 1C591, qualification is mandatory as an Aerospace Control and Warning Systems Craftsman. Experience is also mandatory in supervising or managing aerospace systems operations.

10.4.1.5. **Other.** For award and retention in this AFSC, eligibility for a Secret security clearance is mandatory.

**10.4.2. Training Sources and Resources.** The STS identifies all core tasks required for qualification in an individual's duty position.



10.4.3. **Implementation.** Skill level is awarded when an individual possesses the 7-skill level and is in the grade of SMSgt. Qualification training is initiated anytime an individual is assigned duties they are not qualified to perform.

## **SECTION D - RESOURCE CONSTRAINTS**

**11. Purpose.** This section identifies known resource constraints which preclude optimal/desired training from being developed or conducted, including information such as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility (OPR), and target completion dates. Resource constraints will be reviewed and updated at least annually.

### **12. Apprentice Level Training:**

#### **12.1. Constraints.**

12.1.1. **Impact.** Until all resources are in place, the 334 TRS will not be able to meet the training requirement identified in STS element 11.10.1, Theater Battle Management Core System (TBMCS) operation, but will continue to train students on the Contingency Theater Automated Planning System (CTAPS) instead.

12.1.2. **Resources Required.** TBMCS equipment must be procured and installed along with minor facility modification. The instructor staff must also receive training on the system. A minimum of one Communications-Computer Systems Programming Craftsman (3C072 AFSC) manpower authorization will be required to support system operation at the schoolhouse.

12.1.3. **Action Required.** A Course Resource Estimate (CRE) will be submitted to AETC/DOO identifying all resource shortfalls.

12.2. **OPR and Target Completion Date.** OPR: AFCFM and 334 TRS Training Manager. Target completion date: Jun 2002.

**13. Journeyman Level Training:** No constraints identified.

### **14. Craftsman Level Training:**

#### **14.1. Constraints.**

14.1.1. **Impact.** No formal 1C571 training requirements identified in this STS can be met.

14.1.2. **Resources Required.** Authorization and fill of one 7-skill level CDC writer position is required for 1C571 CDC development.

14.1.3. **Action Required.** 334 TRS submitted an Authorization Change Request (ACR) to 81 TRSS/TSRM. Awaiting AETC approval/ fill of authorized 1C571 CDC writer position before CDC development can begin. An alternate option if authorization is not granted will be to utilize the 1C551 CDC writer and begin 7-skill level CDC development after completion of the 1C551 CDC.

14.2. **OPR and Target Completion Date.** OPR: AFCFM and 334 TRS Training Manager. Target completion date: Unknown

## Part II

### SECTION A - SPECIALTY TRAINING STANDARD

**1. Implementation.** This STS will be used for technical training provided by AETC for classes beginning 20030319 and graduating on 20030513 for 3-skill level training. Projected activation date for the 5-skill level CDC is 16 June 2003. CDC development/ implementation of 7-skill level training will be addressed upon authorization and fill of CDC writer position and/or after completion of the 5-skill level CDC.

*NOTE:* All implementation dates are contingent upon available resources, to include, training references.

**2. Purpose.** As prescribed in AFI 36-2201, this STS:

2.1. Lists in the column 1 (*Task, Knowledge, and Technical Reference*) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties in the 3-, 5-, and 7-skill level. Column 2 (*Core Tasks*) identifies, by an asterisk (\*), specialty-wide training requirements. Items in Column 2 marked with a virgule (/) sign are the tasks and/or knowledge trained in the resident wartime course.

2.2. Shows formal training and correspondence course requirements. Column 3 shows the proficiency to be demonstrated on the job by the graduate as a result of training on the task and knowledge and the career knowledge provided by the correspondence course. See CADRE/AFSC/CDC listing maintained by the unit training manager for current CDC listings. Course descriptions and reporting instructions for course E3ABR1C531-006 are identified in the Air Force Education and Training Course Announcements (ETCA) database which is located at the following URL: <http://hq2af.keesler.af.mil/etca.htm>.

2.3. Provides certification for OJT. Column 4 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification/completed date. (As a minimum, use the following column designators: Training Completed, Certifier Initials).

2.4. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.5. Becomes a job qualification standard for on-the-job training when placed in AF Form 623, On-The-Job Training Record, and used according to AFI 36-2201. When used as a JQS, the following requirements apply:

2.5.1. **Documentation.** Document and certify completion of training. Identify duty position requirements by circling the subparagraph number next to the task statement. As a minimum, complete the following columns in Part 2 of the CFETP: Training Completed, Trainee Initials, and Trainer/Certifying Official Initials. *NOTE:* The AFCFM may supplement these minimum documentation procedures as needed or deemed necessary for the career field.

2.5.1.1. **Converting from Old Document to CFETP.** Evaluate current qualifications and when verified, recertify using: Tasks Previously Certified and Required in Current Duty Position (Core/Critical Tasks). Current date as stop date, trainee's initials, and certifier's initials. Tasks Previously Certified and Required in Current Duty Position (Non-Core/Non-Critical Tasks). Current date as stop date, trainee's initials, and trainer's initials. Tasks Previously Certified but Not Required in Current Duty Position. Carry forward only the previous completion date of certification (not the initials of another person). If and when transcribed tasks become duty position requirements, recertify using standard certification procedures. The person whose initials appear in the trainer or certifier block during the transcription process must meet the requirements of their prescribed role and must be listed in the identification block of Part II to the CFETP. Give the member the old CFETP upon completion of transcription.

2.5.1.2. **Documenting Career Knowledge.** When a CDC is not available: the supervisor identifies STS training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFI 36-2108. For two-time CDC course exam failures: supervisors

identify all STS items corresponding to the areas covered by the CDC. The trainee completes a study of STS references, undergoes evaluation by the task certifier, and receives certification on the STS.  
*NOTE:* Career Knowledge must be documented prior to submitting a CDC waiver.

**2.5.1.3. Decertification and Recertification.** When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using an automated system. Appropriate remarks are entered on the AF Form 623A, On-The-Job Training Record Continuation Sheet, as to the reason for decertification. The individual is recertified (if required) either by erasing the old entries and writing in the new or by using correction fluid (if the entries were made in ink) over the previously certified entry.

**2.5.2. Training Standard.** Tasks are trained and qualified to the Go/No Go level. Go means the individual can perform the task without assistance and meet local demands for accuracy, timeliness, and correct use of procedures.

**2.6.** The CFETP is a guide for development of promotion tests used in the Weighted Airmen Promotion System (WAPS). The USAF Occupational Measurement Squadron (OMS), with 1C5 AFS senior NCOs who have practical experience in their career fields, develops the Specialty Knowledge Tests (SKT). The OMS development team writes SKT test questions that examine STS subject matter areas. Questions are based on study references listed in the WAPS study catalog. WAPS is not applicable to the Air National Guard.

**3. Recommendations.** Comments and recommendations are invited concerning the quality of AETC training. A Customer Service Information Line (CSIL) has been installed for the supervisors' convenience. For a quick response to concerns, call our CSIL at DSN 597-4566, or fax us at DSN 597-3790, or e-mail us at, 81trg-tget@keesler.af.mil. Reference this CTS/STS and identify the specific area of concern (paragraph, training standard element, etc).

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

CHARLES F. WALD, Lt General, USAF  
Deputy Chief of Staff, Air and Space Operations

<b>THIS BLOCK FOR IDENTIFICATION PURPOSES ONLY</b>		
<b>NAME OF TRAINEE</b>		
PRINTED NAME ( <i>Last, First Middle Initial</i> )	INITIALS ( <i>Written</i> )	SSAN
<b>PRINTED NAME OF TRAINER, CERTIFYING OFFICIAL AND WRITTEN INITIALS</b>		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

**QUALITATIVE REQUIREMENTS**

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The Individual
TASK PERFORMANCE LEVELS	1	Can do simple parts of the task. Needs to be told or shown how to do most of the task. (EXTREMELY LIMITED)
	2	Can do most parts of the task. Needs help only on hardest parts. (PARTIALLY PROFICIENT)
	3	Can do all parts of the task. Needs only a spot check of completed work. (COMPETENT)
	4	Can do the complete task quickly and accurately. Can tell or show others how to do the task. (HIGHLY PROFICIENT)
*TASK KNOWLEDGE LEVELS	a	Can name parts, tools, and simple facts about the task. (NOMENCLATURE)
	b	Can determine step by step procedures for doing the task. (PROCEDURES)
	c	Can identify why and when the task must be done and why each step is needed. (OPERATING PRINCIPLES)
	d	Can predict, isolate, and resolve problems about the task. (ADVANCED THEORY)
**SUBJECT KNOWLEDGE LEVELS	A	Can identify basic facts and terms about the subject. (FACTS)
	B	Can identify relationship of basic facts and state general principles about the subject. (PRINCIPLES)
	C	Can analyze facts and principles and draw conclusions about the subject. (ANALYSIS)
	D	Can evaluate conditions and make proper decisions about the subject. (EVALUATION)
EXPLANATIONS		
<p>* A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Examples: b and 1b)</p> <p>** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.</p> <p>- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.</p> <p>x This mark is used alone in course columns to show that training is required but not given due to limitations in resources.</p>		

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASK S	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
<b>1. Career Field Education and Training Plan (CFETP)</b>  TR: 1C5X1 CFETP, AFMAN 36-2245, AFI 36-2606, AFI 36-2502, AFMAN 36-2108	*											
1.1. Career Progression												
1.1.1. Skill Level Duties of 1C531, 1C551, 1C571, 1C591, 1C500		A			B		C					
1.1.2. Special Experience Identifiers (SEIs)		A			B		-					
1.1.3. Prefixes/Suffixes		A			A		-					
1.1.4. Enlisted Education and Training Path		A			B		C					
1.2. Specialty Training Standard (STS)		A			B		-					
<b>2. Commands and Missions</b>  TR: AFDD2, JP 3-0, AFMD 2, 5, 8, 9, 15; AFI 38-101, DODD 5100.1, NORAD Agreement, NATO Chronology 1947-1999, 12 Mar 99 (Dept of State Doc) Web References: <a href="http://www.nato.int/docu/handbook/2001/hb120702.htm">http://www.nato.int/docu/handbook/2001/hb120702.htm</a>  <a href="http://www.nato.int/docu/handbook/2001/hb120703.htm">http://www.nato.int/docu/handbook/2001/hb120703.htm</a>  <a href="http://www.norad.mil/about_us.htm">http://www.norad.mil/about_us.htm</a>	*											
2.1. Combined Commands												
2.1.1. NORAD		A			B		-					
2.1.2. NATO		A			B		-					
2.2. Unified Commands  TR: DODD 5100.1												
2.2.1. USCENTCOM, USJFCOM, USTRANSCOM, USSOUTHCOM, USSOCOM, USSTRATCOM, USEUCOM, USPACOM, and USSPACECOM  TR: DODD 5158.4, <a href="http://www.defenselink.mil/specials/unifiedcommand/">http://www.defenselink.mil/specials/unifiedcommand/</a>		A			B		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASK S	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
2.3. Major Commands (MAJCOMs)  TR: <a href="http://www.af.mil/news/factsheets/air_combat_command.html">http://www.af.mil/news/factsheets/air_combat_command.html</a> or desired command  <a href="http://www.af.mil/news/indexpages/fs_index.shtml">http://www.af.mil/news/indexpages/fs_index.shtml</a>		A			B		-					
<b>3. Weapons Systems / Air Defense Systems</b>  TR: AFPD 13-1, AFI 13-1 AD Volume 3, AFI 13-1 MCS Volume 3, AFI 13-1 AOC Volume 3	*											
3.1. Theater Air Control System (TACS) AOC, CRC, ASOC, TACP, AWACS, JSTARS  TR: AFDD 2-1, AFPD 13-1, AFI 13-1 MCS Volume 3, AFI 13-1, AOC, Volume 3	/	A			B		-					
3.2. NORAD System  TR: AFI 13-1AD Volume 3, NI 10-18		A			B		-					
3.3. Iceland Air Defense System (IADS)  TR: AFI 13-1AD Volume 3		A			B		-					
3.4. Korean Air Defense System (KADS)  TR: Air Component Command Regulation (ACCR) 55-20, 55-43		A			B		-					
<b>4. Crew Resource Management</b>  TR: AFPAM 36-2618, AFI 36-2907, AFI 10-403, 10-201, 36-2503, 36-2201, 36-2101, AFMAN 36-2108, 1C5X1 CFETP												
4.1. Personnel Assignment Tools												
4.1.1. Unit Manpower Document (UMD)		-			-		A					
4.1.2. Unit Personnel Management Roster (UPMR)		-			-		A					
4.1.3. Change UMD/UPMR Using Authorization Change Request (ACR) /		-			-		a					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASK S	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
Authorization Change Notice (ACN)												
4.1.4. Special Experience Identifier (SEI) TR: AFMAN 36-2108		-			-		A					
4.1.5. Use AFSC Shreds TR: AFMAN 36-2108, 1C5X1 CFETP		-			-		a					
4.1.6. Special Duty Assignment Pay (SDAP) Considerations TR: AFI 36-3017		-			-		B					
4.1.7. Develop Crew Schedules /Schedule Work Assignments TR: AFI 13-1 MCS Volume 3; AFI 13-1 AD Volume 3; AFI 13-1AOC Volume 3		-			-		B					
4.1.8. Use Assignment Management System. TR: <a href="http://www.afas.afpc.randolph.af.mil/A_MSWEB/master.cfm">http://www.afas.afpc.randolph.af.mil/A_MSWEB/master.cfm</a>		a			B		-					
4.2. Personnel Orientation												
4.2.1. Orient Newly Assigned Personnel to the Organization, Mission, and Training Requirements of the Unit TR: AFI 36-2201, 36-3401		-			-		-					
4.2.2. Establish Performance Standards TR: 1C5X1 CFETP, AFI 13-1Stan/Eval Volume 2,		-			-		-					
4.3. Operations Supervision Activities TR: AFI 13-1AD Volume 3, AFI 13-1 MCS Volume 3, AFI 13-1 AOC Volume 3												
4.3.1. Evaluate Work Performance Using Appropriate Rating Forms TR: AFI 36-2406, AFPAM 36-2627		-			-		-					
4.3.2. Resolve Operational Problems Encountered by Subordinate Personnel		-			-		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
4.3.3. Initiate Action to Correct Substandard Performance  TR: AFI 36-2907, AFI 36-2503		-			-		-					
4.4. Mobility/Contingency Operations & Planning  TR: AFI 10-403, AFI 10-401 Volume 1 & 2, AFH 10-416, AFPAM 10-417, AFI 38-205, AFMAN 10-100												
4.4.1. Unit Type Code (UTC)		-			-		A					
4.4.1.1. Manpower Force (MANFOR)		-			-		A					
4.4.1.2. Logistics Details (LOGDET)		-			-		A					
4.4.1.3. Mission Capabilities (MISCAP)		-			-		A					
4.4.2. Deployment Readiness Manning Document (DRMD)		-			-		A					
4.4.3. Individual Obligations	*/	A			-		B					
4.4.4. Construct Recall Roster		-			-		b					
4.4.5. Operations Plan (OPLAN)/Time Phased Force Deployment Document (TPFDL) Taskings		-			-		A					
4.4.6. Aerospace Expeditionary Force (AEF) Taskings  TR: AFI 10-400		-			-		A					
<b>5. Training</b>  TR: AFI 36-2201, AFI 36-2101, AFMAN 36-2108, 36-2236, AFMAN 36-2247, AFMAN 36-2245, AFI 13-1MCS Volume 1, AFI 13-109 Volume 1, AFI 13-1AD Volume 1, 1C5X1 CFETP	*											
5.1. Plan and Schedule On the Job Training (OJT)		-			-		-					
5.2. Coordinate with Unit Education and Training Manager		-			-		-					
5.3. Conduct Initial Evaluations		-			-		-					
5.4. Evaluate Adequacy of Training		-			-		-					
5.5. Administer the CDC Program		-			-		-					



1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
5.6. Use Current CFETP		-			-		-					
5.7. Conduct OJT		-			-		-					
5.8. Evaluate OJT		-			-		-					
5.9. Manage OJT Documentation		-			-		-					
5.10. Identify Additional Formal Training Requirements		-			-		-					
<b>6. Security</b> TR: DOD 5200.1, AFI 10-101, AFI 31-401, AFI 31-501, 31-209, AFI 31-601, AFI 33-202, AFI 33-203, AFD 31-1, AFJ131-102	*											
6.1. Information Security												
6.1.1. Computer Security (COMPUSEC) TR: AFI 33-202	/	A			-		-					
6.1.2. Communications Security (COMSEC) TR: AFI 33-210	/	A			-		-					
6.1.2.1. Cryptographic Security TR: AFI 33-211	/	A			-		-					
6.1.2.2. Transmission Security TR: AFI 33-211	/	A			-		-					
6.1.2.3. Physical Security of COMSEC TR: AFI 33-203	/	A			-		-					
6.1.3. Emission Security (EMSEC) TR: AFI 33-203	/	A			-		-					
6.1.4. Operations Security (OPSEC) TR: AFI 10-1101	/	A			-		-					
6.1.5. Information Security TR: AFI 31-401												
6.1.5.1. Security Classification Guide	/	-			-		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
6.1.5.2. Markings TR: DoD 5200.1-R	/	A			-		-					
6.1.5.3. Safeguarding	/	A			-		-					
6.1.6. Personnel Security TR: AFI 31-501		-			-		-					
6.1.7. Industrial Security TR: AFD 31-6		-			-		-					
6.1.8. Physical Security TR: AFI 31-501, AFJI 31-102, AFD 31-1												
6.1.8.1. Deterrence		A			-		-					
6.1.8.2. Security Priority System		A			-		-					
6.1.9. Force Protection TR: AFI 31-210												
6.1.9.1. Threat Levels		A			-		-					
6.1.9.2. Force Protection Conditions (FPCON)		A			-		-					
6.1.10. Human Intelligence (HUMINT) TR: AFI 71-101												
6.1.10.1. Espionage		A			-		-					
6.1.10.2. Subversion		A			-		-					
6.1.10.3. Sabotage		A			-		-					
6.1.10.4. Terrorism		A			-		-					
6.2. Information Operations TR: AFI 31-209		A			-		-					
<b>7. Air Force Occupational Safety and Health (AFOSH) Program</b> TR: AFI 91-301	*											
7.1. AFOSH Standards for 1C5X1 AFSC												

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASK S	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
7.1.1. Occupational Hazards for 1C5X1 AFSC		A			-		-					
7.1.2. Observe Safety Precautions in Work Area		1b			-		-					
7.1.3. Use Safety Procedures Around Electronic Equipment		1b			-		-					
<b>8. Communications</b>  TR: ACPS 121, 125 and 165; AFI 11-214, AFI 33-209, 33-112, 33-113, JCP Pub 12 Vol IV, AFI 33-209, AFH 31-218 Vol I, AFJPAM 10-228, FM101-5-1, JTAO Interface Interoperability Handbook, <a href="http://www.dtic.mil/jcs/j6/cceb/acps/index.html">http://www.dtic.mil/jcs/j6/cceb/acps/index.html</a>												
8.1. Radio/Telephone (R/t) Procedures	*/											
8.1.1. Use Phonetic Alphabet		2b			-		-					
8.1.2. Use Prowords		2b			B		-					
8.1.3. Operational Brevity Code		A			B		-					
8.1.4. Minimize Procedures		A			B		-					
8.1.5. Use Authentication Procedures		2b			-		-					
8.2. Voice Systems	*/											
8.2.1. HF		A			B		-					
8.2.2. VHF		A			B		-					
8.2.3. Use UHF		1b			B		-					
8.2.4. SATCOM		A			B		-					
8.2.5. Have Quick		A			B		-					
8.2.6. Secure Voice Systems												
8.2.6.1. STU III		A			B		-					
8.2.6.2. KY-68		A			B		-					
8.2.6.3. Secure Telephone Equipment (STE)		A			B		-					
8.2.7. Nonsecure Voice System		A			B		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
8.3. Tactical Digital Information Link (TADIL) Interoperability and Weapon/ Air Defense System Interface												
8.3.1. Theater Air Control System (TACS)		A			B		C					
8.3.2. North American Aerospace Defense Command (NORAD)		A			B		-					
8.3.3. Pacific Air Forces (PACAF) Command & Control (C2) System		A			B		-					
8.3.4. TADIL Interface With Other Agencies (NATO/Navy/Marines/ Army)		A			B		C					
<b>9. Weather</b> TR: AFMAN 15-111, AFH 11-203	*											
9.1. Fundamentals		A			B		-					
9.2. Interpret Weather Data		2b			B		-					
<b>10. Basic Radar and Computer Concepts</b> TR: AFTTP 3-1 Series	*/											
10.1. Radar Fundamentals												
10.1.1. Echo Locations		A			B		-					
10.1.2. Doppler Shift		A			B		-					
10.1.3. Pulse Repetition Frequency		-			B		-					
10.1.4. Radar Components		A			B		-					
10.2. Sensor Characteristics												
10.2.1. Mono		A			B		-					
10.2.2. Pulse		A			B		-					
10.2.3. Pulsed Doppler		A			B		-					
10.2.4. Phased Array		A			B		-					
10.2.5. Planar Array		A			B		-					
10.3. Specific Sensors												
10.3.1. ARSR-4		-			B		-					
10.3.2. AN/TPS-75		-			B		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
10.3.3. AN/FPS-117		-			B		-					
10.3.4. AN/FPS-124		-			B		-					
10.4. Computer Fundamentals												
10.4.1. Components		A			B		-					
10.4.2. Basic Operation		A			B		-					
<b>11. Basic Operational Functions</b>												
11.1. Checklists  TR: AFI 13-1MCS Vol 3, AFI 13-1MCS Vol 3, AFI 13-1MCS Vol 3, AFI 13-1MCS Vol 3	*/											
11.1.1. Checklist Concepts		A			B		-					
11.1.2. Maintain Checklist Discipline		1a			B		-					
11.1.3. Emergency Checklist Procedures		A			B		-					
11.1.4. Crew Operations Checklist Procedures		A			B		-					
11.1.5. Checklist Development/Change Recommendation Process		-			A		B					
11.1.6. Other Positional Aids		-			-		-					
11.2. Systems Initialization	*/											
11.2.1. Concept		A			-		-					
11.2.2. Perform Minimum Start-up		2b			-		-					
11.2.3. Console Display Operations & Information Functions		2b			-		-					
11.2.4. Monitor System Performance		-			-		-					
11.3. Surveillance Operations Function  TR: AFI 13-1Series, Litton Handbooks (MCE System only)	*/											
11.3.1. Detect Tracks		2b			B		-					
11.3.2. Report Tracks		2b			B		-					
11.3.3. Maintain Track Continuity		2b			B		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
11.3.4. Perform Passive Tracking		2b			B		-					
11.3.5. Radar Evaluation Procedures		-			A		B					
11.3.6. Initiate TADIL A, B, J Links		2b			B		-					
11.4. Identification Functions	*/											
11.4.1. Perform Track Correlation Using Flight Plan/ATO/ACO Data		2b			B		c					
11.4.2. Apply Electronic Methods (Mode 1, 2, 3, & 4)		2b			B		c					
11.4.3. Apply ID Matrix		2b			B		c					
11.5. Weapons Operation Fundamentals TR: AFI 11-214, AFTTP 3-1 Series	*/											
11.5.1. Rules of Engagement (ROE)/Special Instructions (SPINS) TR: AFMAN 1-1												
11.5.1.1. Purpose		A			B		-					
11.5.1.2. Peacetime/Wartime		A			B		C					
11.5.1.3. ID/KILL		A			B		C					
11.5.2. Mission and Aircraft Types TR: AFDD1, AFI 11-214, AFDD 2-1												
11.5.2.1. Offensive Counter Air (OCA), Defensive Counter Air (DCA), High Value Air Assets (HVAA), Search and Rescue (SAR), Air Interdiction (AI), Suppression of Enemy Air Defenses (SEAD), Close Air Support (CAS)		A			B		-					
11.5.2.2. Aircraft Categories (Fighter, Bomber, C2ISR, UAV, Support)		A			B		-					
11.5.2.3. Aircraft Types (F-15/16, A-10, B-1B, B-52, E-2, E-3, RJ, JSTARS, Predator, Global Hawk, C-17, C-130, KC-10, KC-135)		-			A		B					
11.5.3. Tactics												
11.5.3.1. Stern		A			B		-					
11.5.3.2. Cutoff		A			B		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
11.5.3.3. Pursuit		A			B		-					
11.5.4. Continuum of Control TR: AFI 11-214		A			B		-					
11.5.4.1. Close		A			B		-					
11.5.4.2. Tactical		A			B		-					
11.5.4.3. Broadcast		A			B		-					
11.5.4.4. Advisory		A			B		-					
11.5.4.5. Autonomous		A			B		-					
11.6. Electronic Warfare TR: AFPD 10-7, AFDD 2-5, JP 3-51, AFI 10-707, AFI 10-703	*/											
11.6.1. Electronic Attack (EA)/ Electronic Protection (EP)												
11.6.1.1. Mechanical Threats/Types		A			B		-					
11.6.1.2. Electronic Threat		A			B		-					
11.6.1.3. Communications Threat		A			B		-					
11.6.2. Employ Operator Techniques												
11.6.2.1. Determine Jamming Position		1a			-		-					
11.6.2.2. Determine Jamming Type		1a			-		-					
11.6.2.3. Determine Jamming Intensity		1a			-		-					
11.6.2.4. Report Jamming		1a			-		-					
11.6.2.5. Report Interference		1a			-		-					
11.7. Mission Planning	*/											
11.7.1. Concept		A			B		-					
11.7.2. Mission Planning Information Sources												
11.7.2.1. Air Tasking Order (ATO)		A			B		-					
11.7.2.2. Airspace Control Order (ACO)		A			B		-					
11.7.2.3. OPTASKLINK		A			B		-					

1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR- TIME and/or * CORE TASK S	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
11.7.2.4. Special Instructions (SPINS)/ Rules of Engagement (ROE)		A			B		-					
11.7.2.5. Daily Intelligence Summary (DISUM)		A			B		-					
11.7.2.6. Governing Theater Directives		-			-		-					
11.7.3. Mission Briefing		-			-		-					
11.8. Prepare Reports  TR: AFI 10-201, JCS Pub 6 Volumes 5, 12, & 25, AFMAN 10-206, AFP 10- 709, NI 10-19, AFI 10-707, MIL-STD- 6040	*											
11.8.1. United States Message Text Format (USMTF)		-			A		B					
11.8.2. Operational Reports (SITREP, OPREP-3 Homeline, Beeline, Pinnacle)		-			A		B					
11.8.3. Electromagnetic Interference (EMI) Reports		-			A		b					
11.8.4. Status of Resources and Training System (SORTS) Reports		-			B		b					
11.9. Emergency Actions  TR: JCS Pubs 10 & 12, NI 10-4, MCM 151-92												
11.9.1. Alert Conditions (LERTCONS)												
11.9.1.1. Emergency Conditions (EMERGCONS)		A			B		-					
11.9.1.1.1. Air Defense Warnings		A			B		-					
11.9.1.2. Defense Readiness Conditions (DEFCONS)		A			B		-					
11.9.2. Alerting Networks		-			-		-					
11.9.3. Process Emergency Action Messages		-			-		-					
11.10. Associated C2 Systems												
11.10.1. Operate Theater Battle Management Core System (TBMCS) Force Level	*/	1a			B		-					



1.	2.	3.						4.				
TASK, KNOWLEDGE AND TECHNICAL REFERENCES	/ WAR-TIME and/or * CORE TASKS	PROFICIENCY CODES USED TO INDICATE TRAINING / INFORMATION PROVIDED						CERTIFICATION FOR OJT				
		A		B		C		A	B	C	D	E
		3 SKILL LEVEL		5 SKILL LEVEL		7 SKILL LEVEL		Start Date	Comp Date	Trainer Initials	Certifier Initials	Trainee initials
		(1) CRS	(2) CDC	(1) CRS	(2) CDC	(1) CRS	(2) CDC					
TR: AFI 13-109												
11.10.2. Air Defense System Integrator (ADSI)	*/	A			B		-					
11.10.3. Global Command and Control System (GCCS) TR: CJCSI 6721.01A, CJCSI 6721.02A	*/	A			B		-					
11.10.4. Remote AWACS Digital Information Link (RADIL)		A			B		-					
11.10.5. Theater Air Defense Missile Tracking System (TAD MTS) TR: Northrop Grumman TAD MTS Handbook		A			B		-					
11.11. Use Reference systems TR: AFI 13-1MCS Volume 3, AFI 11-214	*/											
11.11.1. World Geographic Reference System (GEOREF)		2b			-		-					
11.11.2. Military Grid Reference System (MGRS)/Universal Transverse Mercator (UTM)		2b			-		-					
11.11.3. Latitude/Longitude (LAT/LONG)		2b			B		-					
11.11.4. X and Y		2b			-		-					
11.11.5. Bearing/Range		2b			-		-					

## **SECTION B - COURSE OBJECTIVE LIST**

**4. Measurement.** Each objective is indicated as follows: **W** indicates task or subject knowledge which is measured using a written test, **PC** indicates required task performance which is measured with a performance progress check, and **PC/W** indicates separate measurement of both knowledge and performance elements using a written test and a performance progress check. **P** indicates performance test only.

**5. Standard.** The standard is 70% on written examinations. Standards for performance measurement are indicated in the objective and delineated on the individual progress checklist. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained.

**6. Proficiency Level.** Most task performance is taught to the “2b” proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task.

**7. Course Objectives.** These objectives are listed in the sequence taught by Block of Instruction.

### **7.1. Initial Skills Course.**

#### **Block I. Basic Operational Functions**

##### **2. Introduction to Aerospace Control and Warning (AC&W)**

a. Identify career progression through the AC&W Systems Operator career field. STS: 1.1.1, 1.1.2, 1.1.3, 1.1.4 Meas: W

b. Identify the purpose of the Specialty Training Standard within the AC&W career field. STS: 1.2 Meas: W

c. Identify individual obligations within the career field. STS: 4.4.3 Meas: W

d. Identify commands using the AC&W subdivision. STS: 2.1.1, 2.1.2, 2.2.1, 2.3 Meas: W

##### **3. Security**

a. Identify basic facts about command and control security systems. STS: 6.1.1, 6.1.2, 6.1.2.1, 6.1.3, 6.2 Meas: W

b. Identify procedures for maintaining classified material. STS: 6.1.2.2, 6.1.5.2, 6.1.5.3. Meas: W

c. Identify categories of Human Intelligence (HUMINT). STS: 6.1.10.1, 6.1.10.2, 6.1.10.3, 6.1.10.4. Meas: W

d. Identify characteristics of the Resource Protection Program. STS: 6.1.2.3, 6.1.8.1, 6.1.8.2, 6.1.9.1, 6.1.9.2 Meas: W

e. Identify the characteristics of the alert condition. STS: 11.9.1.1, 11.9.1.1.1, 11.9.1.2 Meas: W

##### **4. Operations Security (OPSEC) Vulnerabilities**

a. Identify OPSEC vulnerabilities associated with the 1C5X1 career field. STS: 6.1.4 Meas: W

## 5. Aerospace Control and Warning (AC&W) Systems

- a. Identify Air Defense Systems. STS: 3.1, 3.2, 3.3, 3.4 Meas: W
- b. Identify unit characteristics within the Theater Air Control System (TACS). STS: 3.1 Meas: W
- c. Identify Modular Control Equipment (MCE) characteristics. STS: 3.1, 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.6.2, 8.2.6.3, 8.2.7 Meas: W
- d. Identify CRC section functions. STS: 3.1, 11.3.1, 11.3.2, 11.3.3 Meas: W
- e. Identify CRC position responsibilities. STS: 3.1 Meas: W
- f. Identify elements of weapons operations. STS: 8.1.1, 8.1.2, 8.1.3, 11.5.1.1, 11.5.1.2, 11.5.1.3, 11.5.2.1, 11.5.2.2, 11.5.3.1, 11.5.3.2, 11.5.3.3, 11.5.4.1, 11.5.4.2, 11.5.4.3, 11.5.4.4, 11.5.4.5. Meas: W

## 6. Reference Systems

- a. Using an X & Y reference system sheet, plot six reference system coordinates with no more than two errors and one instructor assist. STS: 11.11.4 Meas: W/PC
- b. Using a bearing/Range reference sheet, plot six reference system coordinates with no more than two errors and one instructor assist. STS: 11.11.5 Meas: W/PC
- c. Using a Latitude and Longitude reference sheet, plot six reference system coordinates with no more than two errors and one instructor assist. STS: 11.11.3 Meas: W/PC
- d. Using a World Geographic Reference System (GEOREF) reference sheet, plot six reference system coordinates with no more than two errors and one instructor assist. STS: 11.11.1 Meas: W/PC
- e. Using a Military Grid Reference System (MGRS) reference sheet, plot six reference system coordinates with no more than two errors and one instructor assist. STS: 11.11.2 Meas: W/PC

## Block II. Mission Planning

### 1. Mission Planning

- a. Identify basic elements of mission planning. STS: 11.5.1.1, 11.5.1.2, 11.5.1.3, 11.7.1, 11.7.2.1, 11.7.2.2, 11.7.2.3, 11.7.2.4, 11.7.2.5 Meas: W

### 2. Theater Battle Management System (TBMCS)

- a. Identify basic principles of TBMCS operations.  
STS: 10.4.1, 10.4.2, 11.7.1, 11.7.2.1, 11.7.2.2, 11.7.2.4, 11.7.2.5, 11.10.1, 11.10.6. Meas: W
- b. Using a TBMCS terminal and WB 1C5 1201, prepare the terminal for basic operation with no more than one error and one instructor assist in each area. STS: 10.4.1, 10.4.2, 1.7.1, 11.7.2.1, 11.7.2.2, 11.7.2.4, 11.7.2.5 11.10.1, 11.10.6. Meas: W/PC
- c. Using a TBMCS terminal and WB 1C5 1201, establish communications messages between duty positions with no more than two errors and one instructor assist in each area. STS: 11.7.1, 11.7.2.1, 11.7.2.2, 11.7.2.4, 11.7.2.5 11.10.6. Meas: W/PC

d. Using a TBMCS terminal and WB 1C5 1201, enter ATO information into the computer data base with no more than two errors and one instructor assist in each area. STS: 11.1.1, 11.1.2, 11.7.1, 11.7.2.1, 11.7.2.2, 11.7.2.4, 11.7.2.5, 11.10.6. Meas: W/PC

### **Block III. System Initialization Procedures**

#### **1. Operator Console Unit (OCU)**

a. Identify occupational hazards within the 1C5X1 career field. STS: 7.1, 7.1.1, 7.1.2, 7.1.3. Meas: W

b. Using an OCU and a checklist, prepare the unit for basic operation with no more than two errors and one instructor assist. STS: 7.1.1, 7.1.2, 7.1.3, 11.1.1, 11.1.2, 11.2.1, 11.2.2, 11.2.3 Meas: W/PC

#### **2. System Initialization**

a. Using an OCU and checklist, enter System Initialization (SI) information into a data base with no more than two errors and one instructor assist. STS: 9.1, 9.2, 11.2.1, 11.2.2, 11.2.3, 11.4.2 Meas: W/PC

b. Using materials provided by the instructor, as a class construct an operational data base with no more than three errors and one instructor assist. STS: 9.1, 9.2, 11.2.1, 11.2.2 Meas: W/PC

c. Using an OCU and the previous built data base, as a class enter SI information with no more than three errors and two instructor assists. STS: 9.1, 9.2, 11.1.1, 11.1.2, 11.2.1, 11.2.2, 11.2.3 Meas: W/PC

#### **3. Communication Procedures**

a. Use Basic Radio Telephone (RT) procedures. STS: 8.1.1, 8.1.2, 8.1.3, 8.1.4 Meas: W/PC

b. Using a Garble Table, authenticate four of six challenges with no more than one instructor assist. STS: 8.1.5 Meas: W/PC

c. Identify characteristics of voice systems. STS: 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 8.2.6.1, 8.2.6.2, 8.2.6.3, 8.2.7 Meas: W

#### **4. Voice Communication**

a. Using an OCU, enter communications data into the operational data base with no more than two errors and one instructor assist. STS: 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 8.2.6.2, 8.2.6.3, 8.2.7, 11.1.1, 11.1.2, 11.2.2, 11.2.3. Meas: W/PC

b. Using an OCU, assign communications data to the VCAU with no more than two errors and one instructor assist. STS: 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 8.2.6.2, 8.2.6.3, 8.2.7, 11.2.2, 11.2.3 Meas: W/PC

c. Using a VCAU, establish communications with no more than two errors and one instructor assist. STS: 8.2.1, 8.2.2, 8.2.3, 8.2.4, 8.2.5, 8.2.6.2, 8.2.6.3, 8.2.7, 11.2.2, 11.2.3 Meas: W/PC

### **Block IV. Operational Procedures**

#### **1. Basic Radar Concepts**

a. Identify basic radar fundamentals. STS: 10.1.1, 10.1.2, 10.1.4 Meas: W

b. Identify sensor characteristics. STS: 10.1.1, 10.2.1, 10.2.2, 10.2.3, 10.2.4, 10.2.5, 11.6.1.1, 11.6.1.2  
Meas: W

## 2. Hooked Data Readout (HDRO) and Modular Control Equipment (MCE) Symbology

a. Using an OCU, identify MCE symbology with no more than three errors and one instructor assist.  
STS: 11.2.1, 11.2.3 Meas: W/PC

b. Using an OCU, determine information displayed in the Hooked Data Readout (HDRO) areas with no more than one error in each area and one instructor assist. STS: 11.2.1, 11.2.3 Meas: W/PC

## 3. Surveillance Operations

a. Using an OCU, perform surveillance functions to maintain tracking continuity with no more than four errors and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.1, 11.3.2, 11.3.3, Meas: W/PC

b. Distinguish characteristics of Identification (ID) functions. STS: 11.1.3, 11.2.1, 11.2.3, 11.4.1, 11.4.2, 11.4.3 Meas: W/PC

c. Using an OCU, perform identification functions with no more than two errors and one instructor assist.  
STS: 11.1.3, 11.1.4, 11.2.1, 11.2.3, 11.4.1, 11.4.2, 11.4.3, 11.5.1.1, 11.5.1.2, 11.5.1.3. Meas: W/PC

d. Using the checklist provided by the instructor, construct a crew scenario as a class with no more than three errors and two instructors assists. STS: 11.1.3, 11.1.4, 11.2.1, 11.2.3, 11.3.1, 11.3.2, 11.3.3, 11.4.1, 11.4.2, 11.4.3 Meas: W/PC

e. Using an OCU, conduct a crew scenario with no more than three errors and two instructor assists.  
STS: 11.1.1, 11.1.2, 11.1.3, 11.1.4, 11.2.1, 11.2.3, 11.3.1, 11.3.2, 11.3.3, 11.4.1, 11.4.2, 11.4.3, 11.5.1.1, 11.5.1.2, 11.5.1.3 Meas: W/PC

## 4. Electronic Warfare

a. Using an OCU, perform electronic warfare functions with no more than one error and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.1, 11.3.2, 11.3.3, 11.6.1.1, 11.6.1.2, 11.6.1.3, 11.6.2.1, 11.6.2.2, 11.6.2.3, 11.6.2.4, 11.6.2.5 Meas: W/PC

b. Using an OCU, perform passive tracking with no more than one error and one instructor assist.  
STS: 11.2.1, 11.2.3, 11.3.1, 11.3.2, 11.3.3, 11.3.4, 11.6.1.1, 11.6.1.2, 11.6.2.1, 11.6.2.2, 11.6.2.3, 11.6.2.4, 11.6.2.5 Meas: W/PC

## Block V. Data Link Operations

### 1. Data Links

a. Identify types of data links. STS: 8.3.1, 8.3.2, 8.3.3, 8.3.4, 11.2.1, 11.2.3, 11.10.2, 11.10.3, 11.10.4, 11.10.5 Meas: W

b. Identify Joint Operational Interface characteristics. STS: 8.3.1, 8.3.2, 8.3.3, 8.3.4, 11.2.1, 11.2.3, 11.10.1, 11.10.2, 11.10.3, 11.10.4, 11.7.2.3 Meas: W

### 2. Data Link Operations

a. Using an OCU, perform data link functions to build a TADIL-B circuit with no more than two errors and one instructor assist. STS: 11.1.1, 11.1.2, 11.3.6, 11.2.1, 11.2.3 Meas: W/PC

- b. Using an OCU, perform data link functions to build a TADIL-A circuit with no more than two errors and one instructor assist. STS: 11.1.1, 11.1.2, 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- c. Using an OCU, perform data link functions to build a TADIL-J circuit with no more than two errors and one instructor assist. STS: 11.1.1, 11.1.2, 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- d. Using an OCU, build data link filters used to adjust the data link picture with no more than two errors and one instructor assist. STS: 11.1.1, 11.1.2, 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- e. Using an OCU, activate a TADIL-A circuit with no more than two errors and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- f. Using an OCU, activate a TADIL-B circuit with no more than two errors and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- g. Using an OCU, activate a TADIL-J circuit with no more than two errors and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- h. Using an OCU, identify types of data link tracks with no more than two errors and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.6 Meas: W/PC
- i. Using an OCU, send/receive data link orders with no more than two errors and one instructor assist. STS: 11.2.1, 11.2.3, 11.3.6 Meas: W/PC

## 7.2. Advanced Skills Course.

NOTE: There is currently no advanced course. This area is reserved.

## SECTION C - SUPPORT MATERIAL

8. The following list of support materials is not all inclusive; however, it covers the most frequently referenced areas.

NOTE: There are currently no support material requirements. This area is reserved.

## SECTION D - TRAINING COURSE INDEX

9. **Purpose.** This section of the CFETP identifies training courses available for the specialty and shows how the courses are used by each MAJCOM in their career field training programs.

### 10. Air Force In-Residence Courses.

COURSE NUMBER	COURSE TITLE	LOCATION
E3ABR1C531 005	Aerospace Control and Warning Systems Apprentice (MCE)	Keesler AFB, MS
Q-JSS-1C531 *	Apprentice Aerospace Control and Warning Operator Training	Tyndall AFB, FL
Z-WD-MCS-PP	Weapons Director Modular Control Systems Training	Papago Park Military Reservation, Phoenix, AZ
ACC AWDC	Advanced Weapons Director Course	Nellis AFB, NV

\* This course will be discontinued effective FY03.

**11. Extension Course Institute (ECI) Courses.**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>USER</b>
CDC 1C551	Aerospace Control and Warning Systems	Unit

**12. Exportable Courses**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>USER</b>
There are currently no exportable courses available. This area is reserved.		

**13. Courses Under Development/Revision**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>USER</b>
E3ABR1C531 005	Aerospace Control and Warning Systems Apprentice (MCE)	AF

***SECTION E - MAJCOM UNIQUE REQUIREMENTS*****14. Air Combat Command Courses.**

<b>COURSE NUMBER</b>	<b>COURSE TITLE</b>	<b>LOCATION</b>
ACC MCS-ST	Modular Control System, Initial Qualification Training, Surveillance Technician	607 ACS, Luke AFB, AZ
ACC MCS-WD	Modular Control System, Initial Qualification Training, Weapons Director	607 ACS, Luke AFB, AZ